

United States Patent and Trademark Office

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NOTICE OF ALLOWANCE AND FEE(S) DUE

023720

7590

12/03/2002

WILLIAMS, MORGAN & AMERSON, P.C. 10333 RICHMOND, SUITE 1100 HOUSTON, TX 77042

EXAMINER

DUONG, KHANH B

ART UNIT CLASS-SUBCLASS

2822 438-585000

DATE MAILED: 12/03/2002

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/676,197	09/28/2000	William R. Roche	2000.032200	9021

TITLE OF INVENTION: METHOD OF FORMING A GATE ELECTRODE ON A SEMICONDUCTOR DEVICE AND A DEVICE INCORPORATING SAME

	APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
•	nonprovisional	NO	\$1280	\$0	\$1280	03/03/2003

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. <u>PROSECUTION ON THE MERITS IS CLOSED</u>, THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown

B. If the status is changed, pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above and notify the United States Patent and Trademark Office of the change in status, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check the box below and enclose the PUBLICATION FEE and 1/2 the ISSUE FEE shown above.

□ Applicant claims SMALL ENTITY status. See 37 CFR 1.27.

II. PART B - FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B - Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Box ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Box ISSUE FEE

Commissioner for Patents Washington, D.C. 20231

(703)746-4000

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 4 should be completed where as for

maintenance fee notification	elow or directed otherwise s.	e in Block 1, by (a) s	pecifying a new correspondence add	ress; and/or (b) indicating a sep	arate "FEE ADDRESS" fo
023720 75			Fee(s) Transmi accompanying	ate of mailing can only be used for ittal. This certificate cannot papers. Each additional paper,	be used for any other such as an assignment or
WILLIAMS, MO 10333 RICHMONI HOUSTON, TX 77	•	ON, P.C.	formal drawing, I hereby certify United States Poenvelope addres	must have its own certificate of r Certificate of Mailing or Tran that this Fee(s) Transmittal is sstal Service with sufficient posta sed to the Box Issue Fee address e USPTO, on the date indicated b	nailing or transmission. smission being deposited with the ge for first class mail in an above, or being facsimile
					(Depositor's name
					(Signature
					(Date
APPLICATION NO.	FILING DATE	FIR	ST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/676,197	09/28/2000		William R. Roche ON A SEMICONDUCTOR DEVIC	2000.032200	9021
APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1280	\$0	\$1280	03/03/2003
EXAMIN		ART UNIT	CLASS-SUBCLASS ·		
DUONG, KI	IANH B	2822	438-585000		
1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363). Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached. "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer			2. For printing on the patent from the names of up to 3 registered programs of the names of up to 3 registered programs of the name of the	patent attorneys the name of a er a registered tes of up to 2	
(A) NAME OF ASSIGNEE	n assignee is identified belo to the USPTO or is being su E	ow, no assignee data v ubmitted under separat (B) R	vill appear on the patent. Inclusion of the cover. Completion of this form is NESIDENCE: (CITY and STATE OR	COUNTRY)	
Please check the appropriate 4a. The following fee(s) are			syment of Fee(s):	corporation or other private g	roup entity governmen
☐ Issue Fee			theck in the amount of the fee(s) is en	closed.	
☐ Publication Fee		🗅 Pay	ment by credit card. Form PTO-2038	3 is attached.	
☐ Advance Order - # of Co	opies	☐ The	Commissioner is hereby authorized sit Account Number	by charge the required fee(s), or	credit any overpayment, to
Commissioner for Patents is	requested to apply the Issue		Fee (if any) or to re-apply any previo	(enclose an extra copy of this usly paid issue fee to the applicat	
(Authorized Signature)		(Date)			
NOTE; The Issue Fee and other than the applicant; a interest as shown by the rec This collection of informal obtain or retain a benefit the application. Confidentiality estimated to take 12 minute completed application for case. Any comments on suggestions for reducing the Patent and Trademark Offinor SEND FEES OR Commissioner for Patents.	a registered attorney or age cords of the United States Patients is required by 37 CFR by the public which is to f	gent; or the assignee atent and Trademark (1.311. The informat ite (and by the USPT)	or other party in Office. on is required to O to process) an		

TRANSMIT THIS FORM WITH FEE(S)

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/676,197	09/28/2000	William R. Roche	2000.032200 9021	
023720 7	7590 12/03/2002		EXAMINER	
WILLIAMS, MORGAN & AMERSON, P.C.			DUONG, KHANH B	
10333 RICHMOND, SUITE 1100 HOUSTON, TX 77042			ART UNIT	PAPER NUMBER
			2822	
			ATE MAILED: 12/03/2002	

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The patent term adjustment to date is 188 days. If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the term adjustment will be 188 days.

If a continued prosecution application (CPA) was filed in the above-identified application, the filing date that determines patent term adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) system. (http://pair.uspto.gov)

Any questions regarding the patent term extension or adjustment determination should be directed to the Office of Patent Legal Administration at (703)305-1383.



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09/676,197	09/28/2000	William R. Roche	2000.032200 9021	
023720 7.	590 12/03/2002		EXAMIN	ER
WILLIAMS, MORGAN & AMERSON, P.C.			DUONG, KHANH B	
10333 RICHMON HOUSTON, TX 7	-	ſ	ART UNIT	PAPER NUMBER
UNITED STATES			2822	
			DATE MAILED: 12/03/2002	

Notice of Possible Fee Increase on October 1, 2002

If a reply to a "Notice of Allowance and Fee(s) Due" is filed in the Office on or after October 1, 2002, then the amount due may be higher than that set forth in the "Notice of Allowance and Fee(s) Due" since there may be an increase in fees effective on October 1, 2002. See Revision of Patent and Trademark Fees for Fiscal Year 2003; Notice of Proposed Rulemaking, 67 Fed. Reg. 30634, 30636 (May 7, 2002). Although a change to the amount of the publication fee is not currently proposed for October 2002, if the issue fee or publication fee is to be paid on or after October 1, 2002, applicant should check the USPTO web site for the current fees before submitting the payment. The USPTO Internet address for the fee schedule is: http://www.uspto.gov/main/howtofees.htm.

If the issue fee paid is the amount shown on the "Notice of Allowance and Fee(s) Due," but not the correct amount in view of any fee increase, a "Notice to Pay Balance of Issue Fee" will be mailed to applicant. In order to avoid processing delays associated with mailing of a "Notice to Pay Balance of Issue Fee," if the response to the Notice of Allowance and Fee(s) due form is to be filed on or after October 1, 2002 (or mailed with a certificate of mailing on or after October 1, 2002), the issue fee paid should be the fee that is required at the time the fee is paid. If the issue fee was previously paid, and the response to the "Notice of Allowance and Fee(s) Due" includes a request to apply a previously-paid issue fee to the issue fee now due, then the difference between the issue fee amount at the time the response is filed and the previously paid issue fee should be paid. See Manual of Patent Examining Procedure, Section 1308.01 (Eighth Edition, August 2001).

Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.

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·	Application No.	Applicant(s)	
•	09/676,197	ROCHE ET AL.	
Notice of Allowability	Examiner	Art Unit	
	Khanh Duong	2822	
The MAILING DATE of this communication appeal claims being allowable, PROSECUTION ON THE MERITS IS nerewith (or previously mailed), a Notice of Allowance (PTOL-85 NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT Rof the Office or upon petition by the applicant. See 37 CFR 1.313) or other appropriate communication is subject and MPEP 1308.	on will be mailed in due course. The to withdrawal from issue at the in	H IS itiative
1. $igtimes$ This communication is responsive to <u>the amendment, Par</u>	per No. 5, filed on October 1, 2002.		
2. The allowed claim(s) is/are <u>1-20</u> .		_	
The drawings filed on are accepted by the Examina	er. odor 35 IIS C & 119(a)-(d) or (f)		_
 4. ☐ Acknowledgment is made of a claim for foreign priority un a) ☐ All b) ☐ Some* c) ☐ None of the: 			
 Certified copies of the priority documents hav 	re been received.		1
2. Certified copies of the priority documents hav	e been received in Application No.		tho.
3. Copies of the certified copies of the priority do	ocuments have been received in th	is national stage application from	ше
International Bureau (PCT Rule 17.2(a)).			
* Certified copies not received:		· · · · · · · · · · · · · · · · · · ·	
Acknowledgment is made of a claim for domestic priority to	under 35 U.S.C. § 119(e) (to a prov	visional application).	
(a) The translation of the foreign language provisional	application has been received.		
6. Acknowledgment is made of a claim for domestic priority i	under 35 U.S.C. §§ 120 and/or 121	•	
Applicant has THREE MONTHS FROM THE "MAILING DATE" of below. Failure to timely comply will result in ABANDONMENT of the complete of the comple	mitted. Note the attached EXAMIN	ER'S AMENDMENT or NOTICE C	
INFORMAL PATENT APPLICATION (PTO-132) WHICH gives rea	ason(s) why the saar or assurance.		
 8. CORRECTED DRAWINGS must be submitted. (a) ☐ including changes required by the Notice of Draftspe 1) ☐ hereto or 2) ☐ to Paper No 			
(b) including changes required by the proposed drawing Examiner.			
(c) including changes required by the attached Examine	er's Amendment / Comment or in the	ne Office action of Paper No	·
Identifying indicia such as the application number (see 37 CFR of each sheet. The drawings should be filed as a separate pap	1.84(c)) should be written on the dra er with a transmittal letter addressed	wings in the top margin (not the ba to the Official Draftsperson.	ck)
9. DEPOSIT OF and/or INFORMATION about the department attached Examiner's comment regarding REQUIREMENT FOR	oosit of BIOLOGICAL MATERIA THE DEPOSIT OF BIOLOGICAL	L must be submitted. Note the MATERIAL.	
Attachment(s)		•	
 1 Notice of References Cited (PTO-892) 3 Notice of Draftperson's Patent Drawing Review (PTO-948) 5 Information Disclosure Statements (PTO-1449), Paper No. 7 Examiner's Comment Regarding Requirement for Deposit of Biological Material 	4⊠ Interview Sui 6⊠ Examiner's A	ormal Patent Application (PTO-152 mmary (PTO-413), Paper No mendment/Comment statement of Reasons for Allowand	- ·
	À	MIR ZARABIAN	
	Supervis	ORY PATENT EXAMINER CLOGY CENTER 2800	

Application/Control Number: 09/676,197

Art Unit: 2822

DETAILED ACTION

6 B

Response to Amendment

This Office Action is in response to the amendment, Paper No. 5, filed on October 7, 2002. Accordingly, claims 7, 8, 16 and 17 were amended. Claims 21-31 remain withdrawn from consideration as being directed to a non-elected invention.

Currently, claims 1-31 are pending in the application.

Examiner's Amendment

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mark Sincell (Reg. No. 52,226) on November 27, 2002.

The application has been amended as follows:

In the Claims

Please cancel claims 21-31.

Allowable Subject Matter

Claims 1-20 are allowed.

The following is an examiner's statement of reasons for allowance: the prior art of record does not show or suggest, in addition to other elements or processes as shown, a method of forming a semiconductor device comprising the steps of: *implanting dopant atoms into the gate* electrode layer to define a layer of dopant material in the gate electrode layer; and patterning at

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least the gate electrode layer to define a gate electrode comprised of a plurality of sidewalls, the sidewalls having a recess formed therein.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Drawings

The proposed drawing correction and/or the proposed substitute sheets of drawings, filed on October 7, 2002 have been *approved*. A proper drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The correction to the drawings will not be held in abeyance.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khanh Duong whose telephone number is (703) 305-1784. The examiner can normally be reached on Monday - Friday (9:00 AM - 6:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amir Zarabian, can be reached on (703) 308-4905. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-3431 for regular communications and (703) 308-7722 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

KBD

November 27, 2002

AMIR ZARABIAN
SUPERVISORY PATENT EXAMINER
TOUNOLOGY CENTER 2800